DEPARTMENT OF STATE

Washington, D.C. 20520

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September 10, 1982

MEMORANDUM FOR MR. DAVID E. PICKFORD
DEPARTMENT OF THE TREASURY

SUBJECT: Papers for SIG-IEP Circulation

Attached is a set of five discussion papers prepared for circulation to participants in the SIG-IEP. The papers describe the following elements of a United States approach to the Europeans on pipeline sanctions:

1. Oil and Gas Equipment and Technology
2. Credit
3. COCOM
4. Alternate Energy Supplies
5. Reductions in U.S. Export Controls

Also attached is a set of related background papers.

NSC review completed

L. Paul Bremer, III
Executive Secretary

Attachments:

As Indicated.

State Dept. review completed

cc: OVP - Mr. Donald P. Gregg
NSC - Mr. Michael O. Wheeler
Agriculture - Mr. Raymond Lett
CEA - Mr. William Niskanen
25X1 CIA - [redacted]
Commerce - Mrs. Helen Robbins
Defense - COL John Stanford
Justice - Mr. F. Henry Habicht
OMB - Mr. Alton Keel
OPD - Mr. Edwin Harper
USTR - Mr. Dennis Whitfield

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DIA review(s) completed.

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OIL AND GAS EQUIPMENT AND TECHNOLOGY

OBJECTIVE

Allied agreement to embargo future transfers of critical oil and gas equipment and technology to the USSR.

ANALYSIS

Until the Reagan Administration the United States had never developed a clear policy as to whether Soviet oil and gas production furthered or impeded Western interests. Even now the fact that our sanctions are tied to Poland reflects some ambivalence.

In the late 1970's, one of the arguments for approval of exports to the USSR of some mid-performance U.S. computers for oil exploration seismic data processing was the possible beneficial effect on the world oil market.

In 1978, the United States imposed controls on exports to the USSR of equipment and technology for exploration and production of oil and gas. But this action was designed as a "flexible tool of foreign policy" and all license applications were approved until revocation of the Dresser drill bit plant license in late 1980.

In March 1980, one of the escape clauses in the U.S. post-Afghanistan proposal to COCOM for a no-exceptions policy was "items that protect Western access to vital commodities or services" and the example given was a computer to regulate the flow of gas on the Orenburg pipeline.

In July 1981, the United States proposed at the Ottawa Summit a "prudent approach" to East-West economic relations, which pointed out the dangers of trade dependency relationships with the USSR. The President also made clear at Ottawa that we were opposed, specifically, to the Siberian gas pipeline.

In addition to the vulnerability from dependence argument, United States officials have stated that Soviet hard currency earnings from sales of gas delivered through the pipeline would strengthen the USSR economically, permitting, inter alia, larger purchases of strategically significant high technology.

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After the imposition of martial law in Poland on December 13, 1981, U.S. controls were expanded on December 30 to cover transmission and refining for energy use and on June 22 to cover non-U.S.-origin items from subsidiaries and products manufactured by licensees using previously transferred technology. These controls had a clear impact on the pipeline; but we have stated that they would be lifted if the three conditions for improvement in Poland stipulated in the NATO January 11 communique were met (lifting of martial law, freedom for political detainees, and resumption of dialogue with Solidarity and the church). To drop their retroactive elements, we want Allied agreement on broadly "equivalent" measures. Such an agreement would, of course, benefit the alliance by burying a debilitating quarrel. It would also enable us to avoid the inherent uncertainties involved in meeting legal challenges to our efforts to enforce the measures we have in place.

Allied agreement to embargo future transfers of critical oil and gas equipment and technology would warrant lifting of U.S. retroactive controls. For as long as they remained in place, controls on future transfers would:

-- impact a crucial sector of the Soviet economy, the development of which depends on Western goods and know-how;

-- affect Soviet exploitation of gas resources for internal use; and

-- cap Soviet prospects for increased hard currency earnings from gas exports.

But gaining Allied agreement to firm and reliable controls will be no easy task. The Allies have consistently resisted the imposition of controls on exports to the USSR for other than strategic security purposes. The only agreed Allied export control in response to Afghanistan was a COCOM no-exceptions policy with escape clauses, and even this was based on de facto observance rather than recorded agreement. (In 1980, French and German firms replaced American steel mill and aluminum smelter exports to the USSR denied by U.S. post-Afghanistan sanctions.)

The only controls on exports to the USSR which our Allies have historically agreed to impose affect items on the COCOM list. Some equipment of significance to the oil and gas industry is already on the COCOM list, principally

exploration equipment (such as magnetometers, gravity meters, computers, recording equipment, and hydrophones) and computerized pipeline control equipment. These items are on the COCOM list because of concerns other than oil and gas, for example computerized seismic equipment is used not only for oil exploration but also for anti-submarine warfare (ASW). The United States proposed in 1978 that COCOM tighten computer controls by adding a sub-item on special signal processing, which would more effectively restrict array transform processors (ATPs), which are used for both oil exploration and ASW. COCOM did not concur, primarily because the United States did not agree to liberalize controls on general purpose computers. We are trying again in 1982 to obtain tighter COCOM controls on ATPs, but other COCOM members may once again insist on liberalization of general purpose computers.

We will have an even more difficult time persuading the Allies to control oil and gas equipment which does not also have other uses of military concern.

The largest value item in Western exports of oil and gas equipment to the USSR is pipe, mostly from Germany, Japan, and Italy (about $1 billion per year). In the 1960's, amidst much controversy, Germany eventually acceded to a U.S. proposal to ban pipe exports to the USSR. The USSR subsequently thanked the United States for this incentive to develop an indigenous Soviet pipe industry. The ban on Western pipe exports was shortlived. For many years, such exports have supplemented Soviet production. Pipe purchases are in bulk, with distribution made to a variety of Soviet projects.

FRG pipe sales to the Soviet Union for the West Siberian pipeline are contracted on an annual basis. This arrangement was developed partly as an FRG response to Soviet demands for lower interest rates. This reduced the size of the overall contract and allowed negotiations to be based on market terms and conditions closer to the actual time of delivery. The US-EC arrangement on steel exports to the United States is contingent on agreement by Mannesmann to reduce exports of pipe and tube to the United States. Given this history, European agreement to embargo pipe would be very difficult to achieve.

At least some of the European arguments for opposing controls on oil and gas equipment would be overcome if our proposal was limited to items with substantial impact on the USSR (other than pipe) and historically exported to the USSR largely by the United States.

The following fit the above description:

I. Exploration

Magnetomers, gravity meters, and seismic equipment (including data processing hardware and software) - These items are already either on the COCOM list or in U.S. proposals to COCOM for revisions of that list. Therefore they need not be included in a new request for Allied controls.

II. Drilling

Offshore positioning equipment, tensioners, risers, and motion-compensating systems;

High-quality drill bits;

High pressure blow-out preventers with automatic controls;

III. Production

Deep submersible pumps;

Gas wellhead assemblies and down hole completion equipment;

IV. Gas pipeline

Pipelayers;

Compressors and turbines.

V. Gas processing equipment

Lists of significant Soviet purchases from the West of such equipment during the period 1975 to 1980 are attached. United States equipment and technology figured prominently in these sales, although in many cases the sales were not directly from the United States.

Western Sales to the Soviet Union, 1975-1980, Of Oil and Gas Equipment and Technology Proposed for Allied Controls[1/]

The following two Tables record a sampling of Western exports of oil and gas equipment and technology to the Soviet Union during the period 1975 to 1980 in the areas proposed for new Allied controls. In key areas the United States is the sole supplier (submersible pumps) or the preferred supplier (gas turbine technology). Many European exports are from subsidiaries of U.S. firms and much of the technology that serves as a basis for European exports originated in the United States.

1/ Source - "Technology and Soviet Energy Availability, Office of Technology Assessment, Congress of the United States, November 1981. This document cites its source as the bi-monthly publication "Soviet Business and Trade". The OTA study states that U.S. industry representatives have indicated that information in this publication about their firms' activities is generally accurate but that OTA has made no attempt to validate total authenticity or completeness of the data.

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Credits to the USSR

U.S. Objectives

-- agreement in principle that the Summit countries should work out a mechanism to manage the flow of official and officially-guaranteed credits to the USSR;

-- that the U.S. proposal to the Versailles Summit should be the basis from which the allies work in drawing up such a mechanism, so that the principle of burdensharing is strictly maintained;

-- that an independent monitoring group be established to review the effect of the mechanism and recommend appropriate changes;

Background/Analysis

Prior to, and at Versailles, the U.S. sought Summit Country support for common restrictions on official credits and guarantees to the Soviet Union. Our goals then and now are to: 1) maintain a net flow of financial resources from the USSR to the West, thus ensuring that Soviet external debt cannot build up and be used as "reverse leverage," as in Poland; 2) make Soviet resource allocation decisions (e.g., increasing defense spending) more difficult, at the margin; and 3) eliminate, ultimately, Western subsidies to Soviet growth and preparedness.

The Buckley Mission began its intensive work on this in February with a view to wrapping up at least the outlines of an agreement that leaders could bless at Versailles. In the three high-level meetings, and one meeting of technical experts, our approach stressed the need to "restrain" official credits and guarantees for reasons of "financial prudence," and to ensure that government credits don't take up the slack of a retreating private market. (Much of the groundwork,in terms of a common understanding of the Soviet financial position, has been laid.) Because of European resistance, we subordinated the "strategic" argument, i.e. that the uninhibited flow of Western credits is directly related to the increase in Soviet defense capabilities. That line of reasoning proved counterproductive with the skeptical allies, given our ability to document it only with anecdotal evidence.

A May 21 experts meeting produced agreement that a technical basis does exist for an agreement which would raise the cost -- and thus slow -- officially-backed credits to the USSR, while preserving the fundamental principle of equal burdensharing among participants. At the final high-level meeting on May 27, the U.S. tabled a draft protocol involving five elements:

1) all countries, except France, would raise cash downpayments substantially above the 15 percent now required, and shorten maturities from 8 1/2 to 5 years on the remaining financed portion.

2) France (allegedly constrained by its credit protocol with the USSR on down payments and maturities) would decrease the proportion of subsidized official financing in favor of private bank financing at market interest rates in order to increase the blended interest rate, thus balancing the policies adopted by the others;

3) countries could adopt alternative cost-raising measures as long as equivalency is maintained;

4) all countries would increase substantially their up-front fees; and

5) an independent monitoring group would be established.

The high-level Summit representatives made no decision and kicked the issue up to the heads of government at Versailles. There we achieved no meaningful progress, though the communique language, in an attempt to cloak the absence of substantive agreement, is ambiguous enough so that we can continue to push for a specific arrangement, and to provide the basis for a meaningful mechanism of credit management, given the political will to do so. The communique refers to the need to "handle cautiously financial relations with the USSR ... in such a way as to ensure they are conducted on a sound economic basis, including also the need for commercial prudence in limiting export credits." It also calls for greater exchange of information in the OECD on "all aspects of our economic, commercial, and financial relations" with the Soviet Union, and for a "periodic ex post review" of these relations.

The allies, to varying degrees, accept only part of our analysis regarding the danger of uninhibited credit flows to the USSR, and of our argument for restraint and reduction of subsidies. The allies either misunderstood or, much more likely, they decided the price we were asking -- a meaningful credit agreement -- was too much to pay to avoid an expansion of the sanctions (which they may have considered unlikely in any event). The question is whether they have changed their minds now that the President has demonstrated his resolve.

As during the Buckley Mission, France will be the key. The French will contend that the agreement to raise interest rates (and move the USSR and some others into the highest category) in the OECD credit arrangement will cost them more exports than the other countries, especially Germany and Japan with their lower interest rate structure. At a time of very high unemployment, Mitterrand will be very reluctant to agree to a proposal that might cut more French jobs.

The Germans are the other major actor. They derive the most benefits from their trade with Eastern Europe and the Soviet Union, and are reluctant to cut back. The FRG hid behind France on this issue, for the most part, but often appeared to play a constructive role. Indeed, the German proposal to raise the cost of credits rather than try to find a way agreeable to all for direct quantitative restrictions (our initial and still preferred thrust) served as the basis for the experts decision and the U.S. proposal. The U.K. and Italy (as well as Canada and Japan) were relatively accommodating during the Buckley Mission. A table on Summit country trade with the USSR is attached.

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COCOM

OBJECTIVES

1) Allied reaffirmation of the existing commitment to improve COCOM controls on the transfer of militarily sensitive technologies.

2) Agreement to a second High Level Meeting in 1983.

3) Reiteration at a high level of our action program for COCOM, including a successful list review.

ANALYSIS

The existing commitment consists primarily of a thirty-three year history of confidential, informal cooperation in the fifteen-member Coordinating Committee (NATO plus Japan minus Iceland). No treaty or executive agreement binds the members to follow COCOM rules. Members may assert their sovereign rights at any time. They seldom do. But they strongly resist formalization of COCOM commitments or publicity concerning COCOM agreements.

All decisions are taken unanimously. There is no written agreement to this effect. But historically no other member has wanted to give up either its right to veto proposals for a new control or its reliance on the United States to discipline the procedures for removing items from control or for approving exceptions cases.

COCOM agreed at a January 1982 High Level Meeting (HLM) to strengthen controls on "really critical" items (while decontrolling items no longer critical) and to define better means to control technology. Before agreement is reached on a revised list, technical discussions will be necessary at the forthcoming list review scheduled to begin in October.

However, there is one significant improvement concerning restrictions on technology related to listed commodities which could be put into effect immediately. It awaits only confirmation of United Kingdom agreement. The British have linked such confirmation to COCOM adoption of a procedure to reduce delays. Such adoption has been delayed by a Defense condition that others first agree to modernize COCOM communications.

The upbeat atmosphere of the January HLM has not been maintained. Since then manifestations of strains on the effective functioning of COCOM have included:

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1) Informal statements by European officials speculating that the dispute over pipeline sanctions will adversely affect cooperation in COCOM;

2) British veto of a US proposal to add clad steel technology to the list, without waiting for COCOM to resume its meetings after the summer recess;

3) French August 19 approval of telephone circuit switching equipment for the USSR without COCOM review;

4) British pressure for a new procedure whereby cases would be considered approved if governments have not communicated a position within ninety days;

5) British, French, German, and Dutch protests that the United States is using COCOM for political rather than security purposes by objecting to all cases for the USSR and Poland, no matter how insignificant (other governments have licensed several such cases despite our objections).

Reaffirmation of the commitments made at the HLM meeting in January and agreement to another HLM meeting next year are reasonable and specific objectives to be attained at a meeting designed to resolve the dispute over pipeline-related sanctions. Nevertheless, we should seize the occasion and complement our COCOM diplomatic strategy by:

-- stressing support for our minimum list review goals,

-- urging dedication of greater resources for COCOM enforcement, and

-- arguing the case that COCOM's administrative machinery requires modernization.

We would state our objectives for COCOM, beyond the present exercise, as follows:

List Review

Agreement in the first round of negotiations (October-December) to priority coverage for: (1) gas turbine engines; (2) certain metallurgical processes; (3) large floating dry docks; (4) electronic grade silicon; (5) printed circuit board technology; (6) space launch vehicles and space craft; (7) robotics; (8) ceramic materials for engines (including manufacturing systems); and (9) certain advanced composites. (It is expected that full agreement on communications switching and computer hardware and software proposals will require more time as well as modification of other going-in positions.)

Agreement as to the upper limits of computer systems approvable for export to Warsaw Pact countries.

(Stressing the above proposals does not mean that other proposals, such a semiconductors and their manufacturing equipment, are of less concern. These technologies are already well covered and generally need only upgrading.)

Enforcement

Agreement for: (1) prelicense and postshipment checks or comparable monitoring of exports; (2) end-user certificates from third countries in the absence of reexport licensing requirements; (3) increased resources for enforcement; (4) better information sharing; (5) harmonization of supporting materials accompanying COCOM applications.

Administration

Agreement to review COCOM funding, facilities, communications, and staff.

In putting forward our case, primary emphasis should be placed on our minimum List Review goals.

Alternative Energy Supply for Western Europe

U.S. Objectives:

1. To convey to the West Europeans our view of the potential for timely development of indigenous Western energy resources.

2. To stress the importance we attach to developing these resources so that European markets are not preempted in the 1990's by increased Soviet gas exports.

3. To inform the Europeans that the U.S. intends to do all it can to free up its own energy markets for export on a reliable, competitive basis.

Analysis

Western Europe's energy markets are rapidly changing. The growing perception that oil prices will be stable or even declining has upset a variety of energy and economic calculations. The recession has caused energy demand to weaken in all major sectors.

Demand for natural gas, one of the fastest growing fuels in Europe in the 1970's, has been hit particularly hard. In the 1980's, incremental supplies of natural gas, including gas from the Soviet Union, will be considerably more expensive than in the past. If oil prices are stable, gas demand may continue to be uncertain, making planning very difficult for gas importing countries.

On the supply side, Europe will face the depletion of two medium-sized Norwegian gas fields, and the intention of the Dutch to reduce (if not eliminate) gas export volumes in order to meet longer-term domestic needs. Norway has major undeveloped deposits, but each represents an engineering challenge and costs are likely to be high. However, the Norwegians are already shopping in the U.S. for the most advanced technology and we understand certain companies (e.g. Shell) are confident the technical challenge can be met at reasonable cost.

This uncertain situation holds the risk that the Soviets will seek to preempt the market for the development of indigenous energy resources, again tempting the Europeans with a gas pipeline mega-project. Using much of the same infrastructure as in the first pipeline, a "second-strand" line could be built for 30 percent less in real terms, but still generate attractive equipment and pipe orders for the Europeans. If such a pipeline were built, it would supply up to 40-45% of West European gas consumption by 2000.

Norwegian energy officials have informed us that the giant "Troll" gas field in the North Sea will be ready for advance sale to European gas consumers by as early as 1985. Gas from this field could start to flow in the early 1990's, but large volumes would not be available before the middle of the decade. By itself Troll could provide over half the currently expected increment in continental European gas demand in the 1990's (35 of an estimated 60 billion cubic meters per year), equivalent to, or slightly more than, what a Soviet "second-strand" pipeline could deliver.

The competition for Europe's medium-term gas market, therefore, will be between the Soviets and the Norwegians. It is a competition in which the Soviets can be expected to accept low (or negative) real returns in order to obtain hard currency earnings. For their part, the Norwegians plan to sell their gas to either the UK or continental Europe, wherever the highest price can be obtained. Norway will need the gas sales revenues in 1990's, however, and is keenly interested in countering any Soviet proposals.

Ambassador Evan Galbraith, working with Jim Buckley's interagency Alternative Energy Group, has been exploring the commercial aspects of marketing new supplies of Norwegian gas in Europe. Galbraith believes the most workable approach would be for the Netherlands and Norway to reach an understanding on transporting, storing and marketing gas through the year 2000. With such an agreement, the Dutch could increase current gas export commitments, to be phased out later and the gas replenished upon development of the large new Norwegian fields. As a first phase, a pipeline could be built to land gas in Holland from Norway's Sleipner field for distribution through the existing Dutch gas grid. Subsequently, gas from the Troll field could be fed in. However, at least as of now, Norway refuses to commit its gas supplies to a particular market in advance of commercial negotiations.

Domestically, the Buckley group has been looking at ways in which the U.S. might contribute to European energy security. The group has identified several actions the U.S. could take to enhance our credibility as a reliable and long-term energy supplier to Western Europe, and intends to present such a package to the NSC for its endorsement. Most of these actions will require new legislation, however, and there is serious dissent from OMB, CEA, OPD to some of the recommendations. Nevertheless, we can go ahead and inform the Europeans that as a matter of general policy, the U.S. intends to do all it can to free up its own energy markets so as to allow greater exports on a reliable, competitive basis. Particularly significant for the Europeans as they consider the high cost of future natural gas supplies will be a renewed U.S. commitment to action on gas decontrol.

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REDUCTION IN U.S. EXPORT CONTROLS

OBJECTIVE

The lifting of the retroactive features of U.S. controls on exports to the USSR and to Poland if we achieve satisfactory agreement with our Allies to (a) join our embargo of future transfers of key categories of oil and gas equipment and technology, (b) restrain export credits to the Soviets, (c) reaffirm and expand the commitment to improve COCOM, and (d) seek non-Soviet energy sources.

ANALYSIS

The feature of our sanctions that the Europeans find most objectionable is their retroactive effect. In Margaret Thatcher's words, "once you have got a deal, you have to keep it, short of war..." The President has authorized the elimination of this feature if we are able to achieve satisfaction on our objectives.

Assuming success, we would then have to make appropriate changes in order to eliminate their impact on contracts entered into with the Soviets prior to December 30, 1981. This will require several modifications in the sanctions, as well as in the denial orders. These details, however, need not be addressed in the meeting with the Europeans.

If sufficient progress is made in achieving essential agreement at our first meeting, we might consider suspending the denial orders in advance of working out all the details of a final package of agreements.

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Cost to U.S. of Sanctions

The Europeans maintain that the United States is being unreasonable in asking them to sacrifice pipeline-related exports while the United States proceeds with grain exports. However, various U.S. Government foreign policy restrictions on trade with the USSR imposed since 1974 have caused substantial sacrifices in U.S. exports to the USSR of both agricultural and industrial items.

1) Jackson-Vanik Amendment - The Trade Act of 1974 (enacted in 1975) conditioned government-supported export credits and most-favored-nation tariff treatment for the USSR (and for other non-market economies) on satisfactory emigration performance. The USSR responded by refusing to ratify a 1972 US-USSR trade agreement. Soviet leaders stated that the U.S. action caused them to divert from U.S. to non-U.S. suppliers purchases valued at $2 billion. We cannot document which contracts were so diverted. One possible example is a Sperry Rand air traffic control (ATC) system. Some Soviet officials maintained that the Datasaab Swedish competition was chosen because of lower price but other Soviet officials told Americans that selection of the Swedish ATC system was politically motivated.

2) Reaction to dissident trial and harassment of Americans - In 1978 the United States denied a Sperry computer to TASS and imposed controls on oil and gas exploration and production equipment in response to the Shcharansky trial and the arrest and harassment of U.S. businessmen and journalists. A French company, CII, thereupon sold a replacement computer to TASS and a French company, Technip, concluded a contract for gaslift equipment, valued at about $200 million, which the American bidder, Teledyne, maintained would have gone to it had it not had to wait for a U.S. license.

3) Afghanistan sanctions - In 1980, in response to the Soviet invasion of Afghanistan, the United States imposed embargoes on grain and on phosphate fertilizers and tightened controls on industrial goods.

a) Grain - Sales in the 1979/80 year were expected to be about 25 million tons. Actual sales were limited to 8 million tons, a loss of 17 million tons (c.$ billion). Other suppliers replaced much of this at the time. Before the embargo we expected to sell soybean meal to the USSR. Since the embargo the Soviets have bought soybean meal exclusively from non-U.S. suppliers.(c.$ million per year).

b) Phosphates - The phosphate embargo, which was in effect from May 1980 to April 1981, suspended shipments of super phosphoric acid (SPA) under a 20-year $20 billion Occidental Petroleum deal. While the U.S. embargo was in effect, the USSR contracted on a long-term basis to replace approximately half of the SPA which was to have been supplied by the United States, specifically:

i) a 20-year contract with Belgium for 160,000 metric tons of SPA;

ii) a 5-year contract with Morocco for 200,000 metric tons of merchant grade acid (a form of phosphoric acid) for the first two years and 300,000 tons of SPA thereafter; and

iii) a 3-year contract with Tunisia for 230,000 metric tons of merchant grade acid.

c) Industrial goods - From January through March 1980 the U.S. suspended the validity of previously issued export licenses and the issuance of any new licenses. Thereafter, the United States instituted a policy of no-exceptions to the USSR for items requiring COCOM review and administered that policy more restrictively than did other COCOM members, e.g., by not approving parts to service previously exported equipment, by denying large cases with minor COCOM-controlled components rather than approving such cases if the COCOM-controlled components were removed, and by reviewing cases for Eastern Europe on a more rigorous basis than before. Specific results included the loss of the $90 million Armco Steel portion of an Armco. Nippon Steel contract for the construction of a steel mill (subsequently replaced by Creusot-Loire) and of the $80 million Alcoa portion of a contract for an aluminum smelter (subsequently replaced by the German firm, Kloeckner). In addition, U.S. computer manufacturers lost substantial markets in Eastern Europe to Siemens and other European companies. The effect of U.S. Afghanistan sanctions on new Soviet orders of U.S. machinery and equipment was dramatic: from July through December of 1980 the United States received only $0.5 million such orders, out of a total of new Western orders of $1,452.9 million for that period. This compared with the average six month total of new U.S. orders in 1978 and 1979 of $208 million, out of an average total of new Western orders of $1,360.5 million. (Six month averages in 1981-U.S. $148 million and total Western $3,416 million in complete data for seven months of 1982-U.S. $35 million and total Western $1,918 million.)

4) Poland sanctions - The December and June U.S. sanctions in response to the imposition of martial law in Poland have had a further deleterious effect on U.S. exports, both agricultural and non-agricultural.

a) Grain - In the wake of the embargo, the U.S. market share has dropped from 70 percent to 30 percent, with no expectation of regaining the lost ground. When negotiations on a new long-term grain agreement were postponed in December, the Soviets boycotted the U.S. grain market for two months. In response to the U.S. expansion of sanctions in June the Soviets boycotted the U.S. market once again. They have made no purchases since May. For the first time, there are no orders on the books for the next agreement year, which begins October 1.

b) Industrial goods - In December the U.S. suspended issuance of licenses for all items requiring a license for export to the USSR. This included not only items requiring COCOM review, but also items excluded from the 1980 U.S. proposal to COCOM for a no-exceptions policy, items approvable at national discretion under COCOM rules, and items controlled unilaterally by the United States (including not only oil and gas items but also all unpublished technical data related to any industrial process). The June sanctions expanded the U.S. controls to all oil and gas exploration, production, transmission, and refining for energy use, not just from the U.S. but also from subsidiaries and licensees. Examples of lost U.S. exports due to the December and June controls on U.S. trade include:

- $500 million Fiat-Allis technology and kits for crawler tractors;

- $175 million GE rotors.

- $100 million Cameron Iron Works blow-out preventers;

- $88 million Caterpillar pipelayers;

Also note that Soviet machinery orders for the first seven months of 1982 (based on incomplete data) were only $35 million from the United States, compared with $787 million from Germany, $190 million from Italy, $86 million from France, and $50 million from the United Kingdom.

Credits and Strategic Concerns

The availability of officially backed credits provides the Soviets with investment resources which they could not finance on their own or obtain from the West under normal commercial standards. This is particularly true for investments in capital goods, which marginally increase their ability to undertake projects to produce new goods, upgrade their quality levels, and avoid considerable research and development expenses by importing Western euqipment and technology at low rates of interest. This contribution to Soviet growth eases some resource constraints and allows a portion of their own investments to be directed into militarily significant industries instead of purely civilian channels.

However, imports backed by Western credits normally have only an indirect impact on the Soviet military build-up. If the Soviets want Western technology to meet a critical military need, they are willing to pay cash for it.

Overall, the USSR must finance with credit its current account balance of payment deficits. This is largely a function of massive grain purchases.

For items of military criticality, Western constraints should be in the form of export controls rather than credit controls. For machinery and equipment not sufficiently critical to warrant COCOM control, the credit issue is not substantially different from that which is relevant to items of no direct military significance, such as grain.

Nevertheless, occasionally Western credit has facilitated transfers of machinery and equipment of some military significance, either because strategic export controls were inadequate or because the military significance was too indirect to warrant imposition of export controls.

There are three broad areas of general industry in which the key role of Western imports is most evident as it pertains to defense industrial support; the machinery producing sector (including motor vehicles), the chemical industry (including tires and plastics) and the electronics industry (including computers and telecommunications). During the 1970s imports of Western products for these industries accounted for half of total hard currency imports. Of this amount, approximately a third was financed by government backed, low interest credits and loans. However, in a number of cases involving whole plant purchases or major projects, 80 percent financing was provided by the West. These major facilities account for a disproportionate share of the high technology transferred from the West.

Although the machinery, chemical and electronics sectors are not formally subordinate to the Ministry of Defense, they have extremely close supplier relationships to the final defense producing Ministries shown in enclosure 1. In many cases ostensibly civilian plants have closed areas in which either defense research is conducted or in which military end items are actually produced.

Machinery and Equipment:

In 1980, the Soviets imported $6 billion of Western machinery and equipment, accounting for 23 percent of their trade with the West and one-third of all such Soviet end-use imports. Some of the remaining machinery imports, primarily from East Europe, are also from Western sources. This volume of imports is equivalent to roughly 10 percent of the machinery component of capital investment in the entire economy. We are thus subsidizing 3% of Soviet investments in this area.

While the imported machinery was supplied to all sectors of the economy, particular emphasis was placed on those areas most directly supporting the military effort. Western financing, often at concessionary rates, enabled the Soviets to obtain advanced technology at exceptionally low costs.

- Most of the NATO countries supplied equipment for the Kama Truck Plant during the mid-1970s. This plant produces heavy trucks for both military and civilian use. Kamas trucks are in use by Soviet troops in both Afghanistan and Eastern Europe.

- In 1977, the FRG provided concessionary 7.5 percent financing for the export of jet turbine shafts to the USSR. The Soviet aircraft industry is almost totally integrated into the military production system.

- In August 1981, Japan granted the Soviets a credit related to an order for 12-ton trailer trucks. The size and specifications of these trucks make them easily convertible to missile and artillery transporters.

Chemicals:

Soviet truck tire production is markedly inferior compared to the West, with an average life one-eighth as long as comparable U.S. truck tires. Truck production has been the major priority in Soviet automotive production. Their potential for dual civilian/military use as well as the overall inadequacy of the Soviet road network are major factors for this emphasis. One out of five trucks in the USSR are estimated to be in military use; that is, 700,000 in a national inventory of about 4 million trucks.

- In May 1980, the French Government provided officially backed export credits to a French firm providing 80 percent financing on a tire factory to be constructed in the USSR. The total value of the credit was 11.8 million French francs.

- In September 1978, the West German Government provided an officially backed export credit for a facility to produce rubber mixtures in a tire factory at Tchimkent, USSR. Total value of contract: 207 million DM.

- A Japanese consortium has signed a $108.9 million contract with the Soviet foreign trade organization Techmashimport for the construction of two butadiene plants at the Tobolsk Petrochemical Complex in West Siberia. The Japanese are to provide machinery and engineering technology and to supervise the plant's construction and initial operations with financing to be handled by the Japanese Eximbank.

Electronics:

Soviet electronic engineers have stated that prior to Western imports there was no truly indigenious microelectronics industry because of the virtual lack of this technology in the USSR. Consequently, to close this gap, the USSR imported a full range of technology, whole plants, materials and equipment worth hundreds of millions of dollars and heavily financed by low interest credits. Soviet engineers also maintain that only one technological base exists in this industry which serves both civilian and military needs. They contend that the military obtains the highest quality, most reliable components that the industry as a whole can produce.

Conclusion:

The flow of legally exported Western technology, equipment and materials to the Soviet Union has been of considerable support to Soviet military programs. To the extent that Western governments have provided credits to underwrite this trade it has greatly facilitated the development and serial production of modern weapons. The Soviets are putting increasing emphasis on quality improvements in their weapons now that they have achieved quantity goals. The emphasis on quality will only heighten their need for Western products, particularly during a period of serious domestic economic stagnation. Since part of their economic dilemma is a severe shortage of hard currency the USSR will be in need of even more credit to sustain trade with the West.

Hard currency available for manufactured goods will have to be spent on continuing the purchase of spare parts and components needed to keep their large inventory of Western machinery producing. The impact of a reduction in the flow of legally exported Western industrial products probably would not be immediate. However, weapons being planned for the late 1980s or 1990s could experience many developmental and production problems if the Soviets are forced to use indigenous resources.

Enclosures:

1. The Defense Industrial Ministries, 1 Cy.
2. Examples of Defense Production in Civilian Industry, 1 Cy

The Defense Industrial Ministries (S)

SECRET

Ministry	Product Lines
Ministry of Aviation Industry (MAP)	Aircraft, aerodynamic missiles, and defensive missiles.
Ministry of General Machine Building (MOM)	Liquid-propellant ballistic missiles, SLV, spacecraft, and surface-to-surface cruise missiles.
Ministry of Defense Industry (MOP)	Conventional ground force weapons, solid-propellant ballistic missiles, optical systems, SAMs, ATGMs.
Ministry of Shipbuilding Industry (MSP)	Naval vessels, naval fire-control systems, mines/torpedoes.
Ministry of Medium Machine Building (MSM)	Nuclear weapons, nuclear propulsion, and power sources.
Ministry of Machine Building (MM)	Conventional ordnance munitions, fuzing, and solid propellants.
Ministry of Radio Industry (MRP)	Computers, radars, guidance and control systems, high-energy lasers, and avionics equipment.
Ministry of Electronics Industry (MEP)	Semiconductors, integrated circuits, and vacuum tubes.
Ministry of Communication Equipment Industry (MPSS)	Communication equipment, radar components, electronic warfare equipment, and military computers.

SECRET

Classified by DIA/DB-4
Declassify on 6 May 1988

Enclosure 1 (S-43,116/DB-4)

SECRET

Ministry	Product Lines
Automotive Industry	Wheeled APC's, military trucks
Chemical and Petroleum Machinebuilding	Missile fuels and components, military and civil explosives.
Construction, Road and Municipal Machinebuilding	Military support equipment, (trailers and missile launchers).
Electrical Equipment Industry	Aerospace, naval electrical systems; hydraulic mechanisms for gun-systems.
Heavy and Transport Machinebuilding	Tanks, tank destroyers, military support equipment (launchers, trailers, garages), turbines and pumps for submarines.
Instrumentbuilding, Automation Equipment and Control Systems	Military computer-related equipment.
Machine Tool and Toolbuilding Industry	Machine-tools for defense industry.
Machinebuilding for Light and Food Industry and Household Appliances	Military logistical equipment.
Power Machinebuilding	Military generators.
Tractor and Agricultural Machinebuilding	Tracked APC's/ICV's, artillery, ACRV's - recon vehicles, MT-LB's - prime movers.

SECRET

Enclosure 2 (S-43,116/DR-4)

SECRET

Coordinating Allied Controls on Exports to the USSR of Oil and Gas Equipment and Technology

Agreement on multilateral controls on such exports will require a multilateral mechanism to provide assurance that self-restraint by one supplier country would not be undermined by the competition in another.

The principal supplier countries are France, Germany, Italy, Japan, the United Kingdom, and the United States. Other occasional supplier countries are Canada, Netherlands, and Norway. All these countries are members of COCOM; all but Japan are members of NATO; all but Japan, the United States, and Canada are members of the EC.

If the supplying countries look for an organization to monitor the controls, the Europeans may initially think of acting together under the EC Treaty (the Treaty of Rome). They used the EC for controls on imports from Argentina and the USSR. (They adopted a limited ban on exports to Iran and a no-exceptions policy on exports to Poland of items requiring COCOM review by acting together informally outside the treaty.) But they may have second thoughts about using the EC for oil and gas equipment controls because of the following major disadvantages:

1) Enacting controls under article 113 of the Rome Treaty, which permits collective trade restraints without requiring subsequent national legislative action, would be resisted by EC member countries which are not supplier countries or which oppose use of this article for security-related measures, such as Greece, Ireland, and, perhaps, Denmark.

2) Basing controls on article 224 of the Treaty, which permits trade control measures for security purposes under national authority, would require that some EC members, such as the UK, enact authorizing national legislation.

3) Informal EC coordination outside the Treaty frame has the same drawback as using article 224.

4) EC coordination by itself would be inadequate because of the need for at least United States and Japanese, and perhaps also Canadian, participation in the process.

The Europeans may recall that NATO was used to coordinate the shortlived ban on pipe exports to the USSR in the 1960's. NATO was also used to coordinate contingency planning in 1981 for controls on exports to the USSR in the event of Soviet military intervention in Poland. However, there are major problems in bringing Japan into NATO deliberations. Moreover, use of NATO would not obviate the need for national legislation in the UK and perhaps elsewhere.

The Europeans may resist using COCOM because of their opposition to using COCOM for "economic warfare" or political purposes (the COCOM strategic criteria call for controlling items of Soviet deficiency with military significance in peacetime). On the other hand, if they had the political will to impose the controls we are suggesting, they might conclude that COCOM was the best route, for the following reasons:

1) COCOM is the only existing group which includes all the major supplier countries.

2) COCOM has 33 years' experience in coordinating the details of controls on exports to the USSR.

3) Other countries would not have to obtain new legislative authority to impose additional COCOM controls.

4) There are COCOM precedents for temporary controls, in the event that it was decided that the new controls should be removed if and when the three conditions for improvement in Poland in the NAC January 11 communique were fulfilled. These take the form of "validity" notes, whereby certain items are added to the list subject to the condition that they may be removed from the list at the initiative of any one member, provided notice is given before the expiration of a stated temporary period (usually a year or two).

5) Other COCOM members have sometimes agreed to add carefully defined items to the list, even if the justification therefor in terms of the COCOM strategic criteria was somewhat weak, if the United States was the major supplier (as would be the case historically for the items under consideration), especially if their future trade interests were protected by validity notes.

Large U.S. Projects Without Government Credit

The following U.S. contracts were concluded without benefit of government supported credits or credit guarantees:

	$ Million
1975 - Iron ore pelletizing	52
1975 - Friction bearing plant	47
1976 - Baby formula plant	25
1977 - Sub-sea oil equipment plant	30
1978 - Drill bit plant	148
1978 - TV color picture tube project	46
1979 - Steel mill (the Armco portion only; there were some Japanese credits to support the Nippon Steel portion)	90
? - Offshore oil rig	40
1972-1978 - Parts and accessories for track laying tractors for use in pipeline and railroad construction and in open pit mining	300
Total (excludes smaller value contracts)	778

(Also note the Commerce estimate that, from 1975 until the imposition of Afghanistan sanctions in early 1980, the United States lost at least $1 billion in exports as a result of withdrawal of access to official credits for sales of machinery and equipment to the Soviet Union. The U.S. share of industrialized Western country exports of machinery and transport equipment to the USSR fell from about 12% in the mid-1970's to about 7% in 1979.)

Increased Resources for National Enforcement of Export Controls and for the COCOM International Secretariat

Need for More Resources

Other COCOM member countries have very small staffs devoted to the national enforcement of export controls. Despite widespread evasions of controls (estimated on the order of $200 million over the past ten years), they investigate very few suspected violations and they prosecute almost no cases. The few investigations which do take place are usually a result of a presentation by the United States Government of intelligence suggesting the need for remedial action.

Other COCOM members (except the British and, occasionally, the French) seldom if ever involve their Defense Ministries in the review of COCOM control lists and cases, even though military significance is highly relevant to the COCOM strategic criteria.

Noting the paucity of resources, some exporters might conclude that their governments did not take the controls very seriously.

The efficiency of the COCOM secretariat would be increased by the acquisition of word processing equipment. The efficiency of the entire COCOM operation would be increased by the acquisition of a computer system to facilitate finding precedent cases. More dignified quarters for the secretariat and for the COCOM meetings would indicate to the participants a heightened sense of the importance and priority accorded to their work by the member governments.

Reasons Other Members Resist Devoting More Resources to COCOM

Budgetary problems are very real, especially during the current period of economic difficulties.

Even in more prosperous times, other members resist giving COCOM-related activities a high visibility. The governments recognize the importance of the operation, but they also are conscious of the following types of political problems which might arise from a higher profile:

- Since it is well known that the United States is by far the strongest advocate of controls, others are reluctant to give the impression that they are blindly following the U.S. lead and are not sufficiently mindful of their own national interests.

- Since it is well known that the USSR has reacted to U.S. controls by buying even uncontrolled items elsewhere, others want to protect their reputations of being reliable suppliers of such items.

- Since some other members have sizable and vocal minorities who are not sympathetic with the controls, even those who are convinced of the need for the controls are reluctant to publicize measures to enforce them.